

## **FCC Part 15.247 Certification** **Test Report**

**FCC ID: P2SNTGSRFER900**

**FCC Rule Part: 15.247**

**ACS Report Number: 04-039-15C**

Manufacturer: Neptune Technology Group, Inc.  
Equipment Type: Utility Meter Data Transmitter  
Model: E-Coder R900

## **RF Exposure Information**

**General Information:**

Applicant: Neptune Technology Group, Inc.  
 ACS Project: 04-0349  
 FCC ID: P2SNTGSRFER900  
 Device Category: Mobile  
 Environment: General Population/Uncontrolled Exposure

**Technical Information:**

Antenna Type: Monopole  
 Antenna Gain: 2.0 dB  
 Transmitter Conducted Power: 16.11dBm  
 Maximum System EIRP: 18.11dBm  
 Operating Configuration: Fix mounted in Basement  
 Exposure Conditions: 20 centimeters

**MPE Calculation**

The minimum separation distance is calculated as follows:

$$E(V/m) = \frac{\sqrt{30 P_x G}}{d} \quad \text{Power Density: } P_d (mW/cm^2) = \frac{E^2}{3770}$$

**MPE Distance**

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*					
Transmit Freq. (MHz)	Radio Power (dBm)	Radio Power (W)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	MPE Distance (cm)
911.08	16.11	0.041	2.0	1.58	2.91

**Installation Guidelines**

The installation manual contains the following text advising how to install the equipment to maintain compliance with the FCC RF exposure requirements:

**"RF Exposure (Intentional Radiators Only)"**

In accordance with FCC requirements of human exposure to radiofrequency fields, the radiating element shall be installed such that a minimum separation distance of (20cm) is maintained between the radiating element and the general population."

**Conclusion**

This device complies with the MPE requirements by providing adequate separation between the device, any radiating structure and the general population.